**import** **static** org.junit.jupiter.api.Assertions.\*;

**import** **static** org.mockito.Mockito.*verify*;

**import** **static** org.mockito.Mockito.*when*;

**import** org.junit.jupiter.api.BeforeEach;

**import** org.junit.jupiter.api.Disabled;

**import** org.junit.jupiter.api.DisplayName;

**import** org.junit.jupiter.api.Test;

**import** org.mockito.InjectMocks;

**import** org.mockito.Mock;

**import** org.mockito.MockitoAnnotations;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** com.training.app.entity.Course;

**import** com.training.app.repository.course.CourseRepository;

**class** CourseServiceImplTest {

@InjectMocks // use on which class to test

CourseServiceImpl courseServiceImpl;

@Mock

CourseRepository courseRepository;

@SuppressWarnings("deprecation")

@BeforeEach

**public** **void** doInit()

{

MockitoAnnotations.~~initMocks~~(**this**);

}

@Test

@DisplayName("Test case to test insertion of Course when input values are valid")

**void** testAddCourse() {

// sample input

Course sampleInput = **new** Course("Java", 20, "Programming","Pooja Thakur");

// expected output

Course actualOutput = **new** Course("Java", 20, "Programming","Pooja Thakur");

actualOutput.setCourseId(0);

actualOutput.setStudents(**null**);

Course expectedOutput = **new** Course("Java", 20, "Programming","Pooja Thakur");

expectedOutput.setCourseId(0);

expectedOutput.setStudents(**null**);

// call actual method and store actual result : actual output

*when*(courseRepository.save(sampleInput)).thenReturn(actualOutput);

// compare actual output with expected output

*assertEquals*(actualOutput, expectedOutput);

}

@Test

@DisplayName("Test case to test insertion of Course when input values are invalid")

**void** testAddCourse2() {

Course sampleInput = **new** Course(**null**, 20, "Programming","Pooja Thakur");

// call actual method and store actual result : actual output

*when*(courseRepository.save(sampleInput)).thenThrow(NullPointerException.**class**);

}

}